

Title (en)
Multi-channel audio encoding and decoding

Title (de)
Kodierung und Dekodierung von mehrkanaligen Tonsignalen

Title (fr)
Codage et décodage de signaux audio à canaux multiples

Publication
EP 1403854 A2 20040331 (EN)

Application
EP 03020110 A 20030904

Priority
• US 40851702 P 20020904
• US 64255003 A 20030815

Abstract (en)
A multi-channel audio data is received. A pre-processing multichannel transform performed on audio data, is varied using audio encoder so as to control quality of audio data. An independent claim is also included for computer readable medium storing multichannel audio encoding program. An audio encoder and decoder use architectures and techniques that improve the efficiency of multi-channel audio coding and decoding. The described strategies include various techniques and tools, which can be used in combination or independently. For example, an audio encoder performs a pre-processing multi-channel transform on multi-channel audio data, varying the transform so as to control quality. The encoder groups multiple windows from different channels into one or more tiles and outputs tile configuration information, which allows the encoder to isolate transients that appear in a particular channel with small windows, but use large windows in other channels. Using a variety of techniques, the encoder performs flexible multi-channel transforms that effectively take advantage of inter-channel correlation. An audio decoder performs corresponding processing and decoding. In addition, the decoder performs a post-processing multi-channel transform for any of multiple different purposes.

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G10L 19/14

IPC 8 full level
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Citation (applicant)
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